

Remarks

In view of the above amendments and the following remarks, favorable reconsideration of the outstanding office action is respectfully requested. Upon entry of this amendment, claims 1-29 and 31-34 will remain in this application. Claims 1, 6, 8-10, 13, 19, 31 and 32 have been amended herein. Claim 30 is canceled herein.

1. Specification

The Examiner has objected to the specification because (on page 16) it indicates that the fiber was a three segment design contrary to what is illustrated in Table 1. To further clarify the issue, the fiber disclosed in the application is comprised of a three segment core and a fourth segment which is the cladding. The specification has been corrected as appropriate. Accordingly, the objection should be withdrawn.

2. Claims Objections

The Examiner has objected to claims 19 and 31. Claim 19 is objected to because the pin spacing was lacking. Further language characterizing the pin array test has been added to claim 19. Further, claim 31 was objected to by the Examiner because of a clerical error therein. Claims 31 has been amended to correct this error. Accordingly, the objections to claims 19 and 31 should be withdrawn.

3. § 102 Rejections

The Examiner has rejected claims 1, 4-15, 17-19, 23-25 and 27-34 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,490,398 (the Gruner-Nielsen '398 patent). The Examiner asserts that Gruner-Nielsen '398 teaches a dispersion compensating optical fiber having at least three segments and a refractive index profile selected to provide total dispersion between -95 and -225 ps/nm/km at 1595 nm and a dispersion slope of less than -1.0 ps/nm²/km at 1595 nm (See Fig. 4 and Col. 8, Fiber C).

Respectfully, the rejection of claim under 102(e) is traversed. In particular, Examiner should note that in present claim 1, dispersion is given at 1595 nm (not at 1550 nm). For the fiber type described in Gruner-Nielsen '398, there is a significant difference in dispersion and slope at 1595 nm versus 1550 nm. In Fig. 4 of Gruner-Nielsen '398, it is readily apparent that dispersion at 1595 nm is about -240 ps/nm/km, while it is about -146 ps/nm/km at 1550 nm. In the additional examples given in Gruner-Nielsen '398, for example, Examples A and B have dispersion slopes greater than (not less than) -1.0 ps/nm/km and Example C has

dispersion of about -260 ps/nm/km at 1595 nm (also outside the claimed range). Thus, none of the examples in Gruner-Nielsen '398 teach or suggest a dispersion compensating fiber having the combination of dispersion and dispersion slope properties claimed in the present application (at 1595 nm).

In particular, Gruner-Nielsen '398 does not teach or suggest a dispersion compensating fiber having a three segment core and a dispersion at 1595 nm of between about -95 and -225 ps/nm/km and dispersion slope at 1595 nm less than -1.0 ps/nm²/km. As such, the 102(e) rejection of claims 1, 4-15, 17-19, 23-25, and 27-34 based upon Gruner-Nielsen '398 is inappropriate, and should be withdrawn.

The Examiner has further rejected claims 1-3, 16, 20-22 and 26 under 35 U.S.C. § 102(e) as being anticipated by Okuno (U.S. Patent No. 6,501,892). The Examiner asserts that Okuno '892 teaches a dispersion compensating optical fiber having at least three segments and a refractive index profile selected to provide total dispersion between -95 and -225 ps/nm/km at 1595 nm and a dispersion slope of less than -1.0 ps/nm²/km at 1595 nm (See Fig. 10, C100).

Respectfully, the rejection of claim under 102(e) is traversed. Although, as shown in Fig. 10 of Okuno '892, the dispersion at 1595 nm is about -160 ps/nm/km, while the slope at 1595 nm is about -2.6 ps/nm²/km resulting in a kappa of about 61 nm at 1595 nm, the structure of the present invention dispersion compensating fiber is not taught or suggested in Okuno '892. In particular, Okuno '892 does not teach or suggest a fiber having the core structure having at least three segments, including a central core segment having an outer radius R₁ in the range of between about 1.5 μm and 2.0 μm, a moat segment having an outer radius R₂ in the range of between about 4.5 μm and 6.5 μm, in combination with a total dispersion at 1595 nm between about -95 ps/nm-km and -225 ps/nm-km; and a dispersion slope more negative than -1.0 ps/nm²-km at 1595 nm. Accordingly, since Okuno '892 reference does not teach the claimed structure, the rejection is flawed and should be withdrawn.

4. Conclusion

Based upon the above amendments, remarks, and papers of record, Applicant believes the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicant respectfully requests reconsideration of the pending claims 1-29 and 31-34 and a prompt Notice of Allowance thereon.

Applicant believes that a one month extension of time is necessary to make this Response timely. Should Applicant be in error, Applicant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Reply timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.

Please direct any questions or comments to Randall S. Wayland at 607-974-0463.

Respectfully submitted,

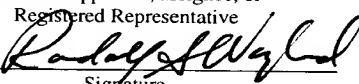
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